



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,722	02/07/2002	Andrew J.S. Evans	08565.136	3152
23483 75	90 02/25/2005		EXAMINER	
	TLER PICKERING HA	RAGONESE, ANDREA M		
60 STATE STR	EET			
BOSTON, MA 02109			ART UNIT	PAPER NUMBER
,			3743	

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/071,722	EVANS ET AL.			
		Examiner	Art Unit			
		Andrea M. Ragonese	3743			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on <u>08 De</u>	ecember 2004.				
2a) <u></u> □	This action is FINAL . 2b)⊠ This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5)□ 6)⊠ 7)⊠	Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) 10-14 is/are withdraw Claim(s) is/are allowed. Claim(s) 1.2 and 6-9 is/are rejected. Claim(s) 3-5 is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
9)	The specification is objected to by the Examine	ır.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachmen		_				
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
3) 🛛 Inform	e of Draitsperson's Patent Drawing Review (PTO-946) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date <u>see attached</u> .		atent Application (PTO-152)			

Application/Control Number: 10/071,722 Page 2

Art Unit: 3743

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-9, in the reply filed on December 8, 2004 is acknowledged. The traversal is on the ground(s) that "the examination of Groups I and II together, would not pose a <u>serious</u> burden upon the Examiner." The Examiner respectfully disagrees. This argument, therefore, is not found persuasive because the Examiner does believe that examination of both inventions does place a serious burden upon her workload. Each invention has different search areas through which the Examiner must consider. In addition, the search areas required for the method of making the orthotic strut are not required for the

proper and is, therefore, made FINAL.

2. Claims 10-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 8, 2004.

search for the invention of the orthotic strut alone. The requirement is still deemed

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Easton et al. (US 5,364,095).

Regarding claim 1, Easton et al. discloses an apparatus 10 comprising:

a ductile metallic tube 14 having a cross-section of elongate shape; and
an internal core 26 of substantially uncured plastics and fibre composite material
which is a close fit within the tube 14;

wherein the tube **14** is at least 300 mm in length (average length is 34.0 inches, or 864 mm) and has an internal cross-sectional area which is no more than Kc^2 , where c is the internal circumference of the tube **14** (range of 2.97 and 3.31 inches, or 75.4 and 84.1 mm) and K is a number less than or equal to 0.1 (when K is equal to 0.1, Kc^2 is equal to between 0.882 and 1.10 square inches, or 569 and 710 mm², which is less than between 0.701 and 0.874 square inches, or 452 and 564 mm²).

Regarding **claim 2**, wherein the tube **14** is made of aluminum alloy tubing and has a wall thickness in the range of from 0.5 mm to 2.0 mm (or 0.0145 inches to 0.0780 inches). Specifically, the wall thickness is between 0.025 inches and 0.045 inches, which falls within this range.

Regarding **claim 6**, wherein the value of K is in the range of from 0.04 to 0.10. As stated above, the equation was proven true by using a value of 0.10.

Regarding claims 7-8, wherein the internal core comprises an inner kernel made of a heat-activated expansion agent extending lengthwise through the strut surrounded by the said plastics and fibre composite material, wherein the expansion agent is a

Art Unit: 3743

foaming agent which is formed as one or more longitudinally extending strings of material such as an epoxy resin (column 3, lines 9-22).

Regarding claim 9, wherein the core has been cured (column 3, lines 52-57).

- 5. Examiner notes that Applicant has essentially claimed a statement of intended use. Specifically, in **claim 1**, Applicant recites, "An orthotic strut component for an orthosis." Easton et al., as discussed above, discloses an apparatus in which the claimed functional limitation(s) can inherently be performed since the apparatus of Easton et al. utilizes a ductile metallic tube that is fully capable of performing the function of an orthotic strut, which is supporting the limb to which the orthotic strut is attached. This recitation is a statement of intended use utilizing functional language, which may not be given patentable weight in apparatus claims. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone. See MPEP § 2114. Therefore, as broadly interpreted by the Examiner, the previously presented rejection is applied to **claims 1, 2** and **6-9**, based on the prior art of record. See *In re Swinehart*, 169 USPQ 226 (CCPA 1971); *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997).
- 6. In addition, this recitation "An orthotic strut component for an orthosis" has not been given patentable weight because the recitation occurs only in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process

steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Allowable Subject Matter

7. Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vito et al. (US 4,688,559), Merlette (US 5,156,631), Tailor et al. (US 5,624,386), Townsend et al. (US 5,658,244), Bader (US 5,817,041), Stearns et al. (US 5,891,071), Townsend et al. (US 6,413,232 B1) and Townsend et al. (US 6,500,139 B1) all disclose orthotic struts comprised of a composite fibre material, but fail to teach or suggest, individually or combination, the recitation of a metallic tubular configuration (with an oblong cross-sectional shape) with a plastics and fibre composite material core.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Ragonese whose telephone number is **571-272-4804**. The examiner can normally be reached on Monday through Friday from 9:00 am until 5:00 pm.
- 10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/071,722 Page 6

Art Unit: 3743

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMR WWW February 22, 2005

KIM M. LEWIS PRIMARY EXAMINER

AU 3743